



# MARINE CORPS INSTALLATIONS EAST



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## GROUND SAFETY COURSE

EXPLOSIVE SAFETY OFFICE



# EXPLOSIVE SAFETY OFFICE



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# SAFETY ALERT SAFETY ALERT



## IMPROPER AMMUNITION AND EXPLOSIVES STORAGE

**IMPROPERLY** STORING UNIT AMMUNITION AND EXPLOSIVES (A&E) SUCH AS 40MM , ROCKETS, GRENADES , C-4 AND HIGH EXPLOSIVES RISK ASSETS AND LIVES



A&E MUST BE  
STORED AT THE  
ASP/AHA NOT A  
MILVAN.



**ALWAYS** COORDINATE A&E STORAGE WITH THE  
MAYOR CELL, MASTER PLANNER AND EMERGENCY  
RESPONDERS

**USFOR-A EXPLOSIVES SAFETY DSN : 318-449-4828 (Kabul)  
318-841-1160/1442 (Kandahar) 318-431-4212 (Bagram)**

# SAFETY ALERT SAFETY ALERT





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- MCO 8020.10\_
  - Governs policy for Marine Corps ammunition management and explosives safety



# HTTPS://NOSSA.NMCI.NAVY.MIL

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11/2010 Shore Station Explosives Safety Compliance (ES) Program

- (4) Pillars
- Failure of (1) results in a failure

Program 01 - Command Administration and Management (Rev. Feb 2010)

Program 02 - Qualification & Certification (Rev. Apr 2010)

Program 03 - Standard Operating Procedures (SOPs) (Rev. Feb. 2010)

Program 04 - Ammunition Storage/Magazines (Rev. Feb 2010)

Program 05 - Operating Buildings and Production Lines (Rev. Feb 2010)

Program 06 - Lightning Protection/Grounding (Rev. Feb 2010)

Program 07 - Environmental Compliance (Rev. Apr 2010)

Program 08 - AA&E Physical Security (Rev. Feb 2010)

Program 09 - Ranges/EOD (Rev. Feb 2011)

Program 10 - Motor Vehicle Transportation (Rev. Feb 2010)

Program 11 - Railroad Transportation (Rev. Feb 2010)

Program 12 - Piers And Wharves/Barges (Rev. Feb 2010)

Program 13 - Airfield Operations (Rev. Feb 2010)

Program 14 - Ammunition/Explosives Associated Equipment (Rev. Feb 2010)



# LEARNING OBJECTIVES

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- State the Directing policies for Marine Corps Ammunition Management and Safety.
- Identify the minimum requirements for the storing of ammunition and explosives.
- Identify those persons required to be Qualified and Certified to handle ammunition and explosives.
- Identify Temporary Field Storage Requirements.
- Identify the minimum requirements for transporting ammunition and explosives within a motor vehicle.
- State the purpose and application of a command Amnesty Program.



# ANNUAL TRAINING



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- In accordance with MCO P8020.10 all Commanders, Officers, and Officers in Charge will ensure Annual AA&E Awareness Training is conducted and incorporated into the annual training schedule and professional military education.
- The ESO conducts (4) classes per calendar year
- <http://www.marines.mil/unit/mcbleieune/e>



# AA&E Umbrella

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1. A&E Audit and Verification Officer/SNCO
2. AA&E Officer/SNCO
3. Ordnance Officer
4. Area Security Officer
5. Range Safety Officer
6. Armorer/Custodian
7. Ammo Tech (ESR)
8. Ammo Handler/Driver



# A&E Audit & Verification Officer

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- “The A&E Audit and Verification Officer must be a disinterested Marine who has no responsibilities concerning ammunition security or accountability.”
- Certify Expenditure Reports
- Audit the A&E Accountability Procedures Quarterly
- Validate A&E Procedures Quarterly
- Audit the AA&E Chain of Custody, i.e.,
  - completed transaction file monthly
- Validate NAVMC 10774 Cards
- Maintain letters for current FY plus previous



# A&E Officer

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- “The AA&E Officer shall be that Officer/SNCO which has direct control/responsibility of the armory (e.g., Armory Officer, Ordnance Officer, S-4 Officer).”
- Shall conduct a complete review of the account within 30 days
- Shall complete a wall-to-wall inventory within 30 days
- Shall report any discrepancies to Commanding Officer
- Maintain close liaison w/Area Security Officer
- Assist in investigating AA&E losses
- Report status of command compliance quarterly (copies kept for two years)
- Monitor performance and reporting of all AA&E inventories, as well as related MLSR reports.
- Ensure ROIC's/RSO's comply with their duties...
- Maintain letters for current FY plus previous two years



# Range OIC

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- Conduct joint inventory/receipt of A&E when delivered (prior to firing).
- Ensure DD Form 1348-1 (Issue Doc) and first portion of Expenditure Report are completed (prior to firing).
- Account for and supervise the distribution of A&E.
- Prior to issue, blank ammo will be inspected for the presence of live ammo.
- Ensure all applicable Notice of Ammunition Reclassifications (NAR) / Ammo Info Notices



# Range OIC

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- Conduct joint inventory, complete DD Form 1348-1 (Turn-In Doc) and Expenditure Report for unexpended ammunition (prior to ammunition leaving the range).
- Ensure that all expended A&E material is visually and physically inspected for live A&E prior to delivery to DRMO (AT4, brass, mortar tubes).
- Ensure Expenditure Report, issue, and turn in documents are turned over to the A&E Officer upon completion of the exercise.



# DELINKING

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- **BO 3570.1C** (Range Control Order)
- Pg 5-8, (11) During fire conditions 5 and above units are restricted from delinking ammunition until approved by the G-4/S-4 ammunition section. .50 Cal ammunition is not authorized to be delinked. When approval for delinking ammunition has been granted, only ***approved (ie: .50 Cal)*** tools and methods are authorized.
- 2d Marine Division G-4 Ammo only authorizes the delinking of 5000 rounds or less A064 and A131.

**CLASS V(W) EXPENDITURE REPORT**

NAVMC 11381 (Rev. 4-02) (EF) (Previous edition will not be used)

SN: 0109-LF-982-8500

FROM: (ROS/EOD)	PRINT NAME	RANK	SSN	UNIT/RUC/PHONE NUMBER
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Ref: (a) MCO P4400.150

1. Per the reference, the following Class V(W) expenditure report is completed:

Range(s) and date(s) \_\_\_\_\_

RECEIPT DOC#	DODIC	NOMENCLATURE	LOT #	QTY REQUESTED	QTY RECEIVED (NOTE 1)	QTY EXPENDED	QTY TURNED IN (NOTE 2)

I certify the receipt/expenditure data listed above is accurate and the "Qty expended" as listed above was consumed on the range/training area as documented. That a range sweep/amnesty brief was conducted and all expended ammunition retrograde material was checked for dangerous/hazardous items.

(If applicable) \_\_\_\_ (Number) unused propellant increments were burned on ranges per Individual Training Standards, under the supervision of the Position Commander: \_\_\_\_\_  
(Print Name, Rank, Signature)

RSO/EOD Signature \_\_\_\_\_ Date \_\_\_\_\_

I certify that I have received those quantities of unexpended Class V(W) ammunition listed above and have completed the turn-in documents per (note 2).

Ammo Tech/EOD and/or Authorized Individual:

(Print Name, Rank) \_\_\_\_\_

(Signature) \_\_\_\_\_ Date \_\_\_\_\_

NOTE 1: All serial numbers for serialized ammunitions will be annotated on a separate sheet and attached to this expenditure report with a copy of the expenditure msg.

NOTE 2: Unexpended Class V(W) will be turned in using the same document number as the initial issue document using a suffix (Example: M00001-8001-0001-A)

Retention: Expenditure reports are filed by fiscal year (FY) and retained for current year plus two FY's.

(A&E Audit & Verification Officer Only): I certify I have audited this expenditure report against all issue and turn-in documents (DD1348s) and corrective action

(Circle one) is or is not required. A&E Audit & Verification Officer (Signature) \_\_\_\_\_ Date \_\_\_\_\_



# Excessive Breakouts



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- Range Safety Officers must ensure that only the A&E that will be expended is unpackaged .
- Excessive A&E breakout is not authorized!
- Only opening the items you intend to fire at that particular time.





# FIELD STORAGE

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- Installation commanders may authorize temporary field storage on approved ranges/training area up to 90 days.
  - MCB CLNC allows 14 days
- Temporary storage facilities/sites will be governed by the provisions on NAVSEA OP 5 Vol I.
- Use of OP 5 Vol III requires MARCORSYSCOM PM AMMO approval.



# Field Storage

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- Distance between stacks should not be less than 50 feet (field storage only)
- Segregation
  - Compatibility
  - Live / Practice / Blank
- Quantity Distance from Bivouac sites
  - NAVSEA OP 5 Vol I Chapter 7



# UXO

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- The hazards of Unexploded Ordnance (UXO) on the battlefield have an enormous effect on command-and-control decisions for battle planning. During Operation Desert Storm, 21 Army personnel were killed and 53 injured as a direct result of handling (or mishandling) UXO. UXO is a hazard, whether it is on the battlefield or in designated training areas.
- Do not transmit on any radio frequencies near a suspected UXO hazard. Signals
- transmitted from items such as walkie-talkies, short-wave radios, citizens' band (CB)
- radios, or other communications and navigation devices may detonate the UXO



# UXO Cont.

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- Whenever possible, mark the general location of the UXO hazard with engineer tape, colored cloth, or colored ribbon. Attach the marker to a stick or some other object so that it is about 3 feet off the ground and visible from all approaches. Place the marker no closer than the point where you first recognized the UXO hazard.
- Stay away from areas known



# UXO Cont.

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- If it looks dangerous, IT IS! Stay away from it, mark off the area and call emergency personnel to handle the item!



# Hazard to Electromagnetic

## Radiation to Ordnance

### ➤ Classifications

- HERO Safe – No hazard exist
- HERO Susceptible – Fully assembled undergoing normal handling & loading
- HERO Unsafe – devices with exposed wires arranged in the most optimum receiving orientation
- HERO Unreliable – undetermined status



# HERO Cont.

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- 15'- closed / 25' open magazine
- HERO Warning Symbols and Labels alert the radio and portable emitter systems operators of the potential HERO hazards.
- Low-power transceiver devices such as cell phones, active pagers, Computer Tablets





# Fire Prevention

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- **Apply No Water!** If water is added, it could intensify the flames.
- This indicates the presence of toxic smokes
- NAVSEA SWO20-AC-SAF-010
  - Storage Compatibility: Table 2-7



# Compatibility Groups



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- A&E is further categorized in to 13 compatibility groups.
- A, B, C, D, E, F, G, H, J, K, L, N, S
- Compatibility is based on the type/degree of risk the A&E items present in storage and transportation.



# Compatibility Groups (cont)



- Compatibility groups determine what A&E can be stored or transported together without increasing the probability of accident or magnitude of an accident.



# Site Approvals

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- All requests are submitted through your chain of command to your local ESO; MARCORSYSCOM/NOSSA/DDESB
- Site Approvals
  - New construction /temp storage/training facility/etc...
- Event Waivers
  - Case by case for a particular evolution
  - One time limited duration
- Waivers
  - Temp deviation pending corrective action
  - 2yrs
- Exemptions
  - Long term deviation
  - 5yrs



# Reports



➤ WESS

➤ ESAMS

➤ ESCS

➤ **Explosive Mishap report**

➤ **OP NAVINST 5102.1D**

➤ **Contact your local ESO for guidance**



# MLSR

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- **MCO 5530.14A ( Appendix M)**
- **Maintain paperwork for current FY plus previous two FY's**
- **Time lines - initial telephonic(Injury/Fatality)/48 hours**
  - **Small arms 20mm or smaller (over 1000 rds)**
  - **One or more rockets**
  - **One or more mines**
  - **... device containing explosive material**



# MALFUNCTION DEFECT

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- **“All” malfunctions get reported/info required**
- **Time lines - initial telephonic/24 hrs/96 hrs/15 days**
- **Phone numbers:**
  - **ESO- 910 451- 6281 / 910-554-9175**
  - **II MEF - 451-8898**
  - **II MARDIV - 451-8378**
  - **CLNC ASP - 451-2949 (Duty Tech) / 451- 4722**
  - **Camp Pend ASP - (760) 725-3202**
  - **Camp Pen ESO (760) 763-4817**
  - **CMA - (760) 830-4879 / (760) 830-3603**
  - **CMA ESO - (760) 830-8464**
  - **MARCORSYSCOM (PMAM) - 378-9495 or (703) 784-9175**
  - **HQMC Command Center - 255-7366 or comm: (703) 695-7366**



# MALFUNCTION DEFECT

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- MARCORSYSCOM/PM AMMO will:
  - Review all malfunction and defect reports;
  - Prepare technical response with recommendation
  - \*\* 5 days for non-critical and 24 hours for critical. \*\*
  - Conduct formal investigations involving casualties, equipment<sup>37</sup>



# MALF / DEFECT

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- **PURPOSE: (Assessment Program)**
  - **Ensure the safety and reliability of MC ground ammo.**
  - **Provides a near ‘real time’ analysis of ammo performance...**
  - ***Only effective IF***



# Explosive Mishaps

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- We loose too many Marines/Sailors to lack of compliance to proper procedures, experience, or complacency.
- TRAIN HOW WE FIGHT
- Every Marine/Sailor is a safety officer
  - Let your voice be heard so lives be saved!





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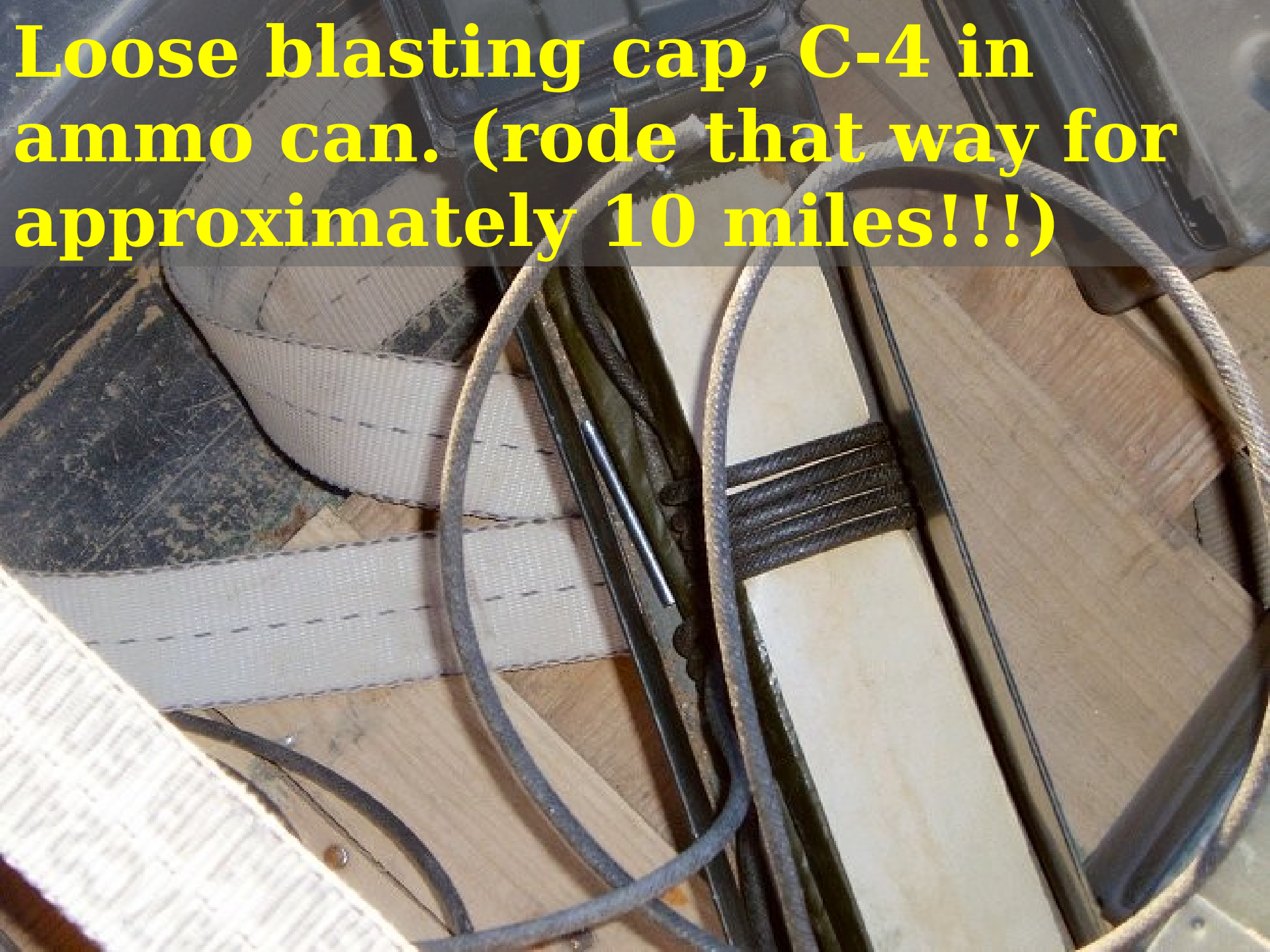
AFT END

250-100000-1.1

**Fuze ignitor, time fuze, blasting cap, inserted into C-4 with det cord !!!**



**Loose blasting cap, C-4 in  
ammo can. (rode that way for  
approximately 10 miles!!!)**





# References

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- **MCO 5530.14A - Marine Corps Physical Security Program Manual**
  - **MLSR reporting / A&E Screening Forms**
- **MCO P4400.150E - Consumer Level Policy Manual Chapter 7**
- **MCO P8020.10B - Management & Explosives Safety Chapter 4**
- **MCO P8023.3A - Personnel Qualification & Certification Program for Class V Ammunition & Explosives**
- **MCO 8025.1D - Malfunction Reporting**
- **NAVMC 8015.1 - PICP for class V(W)**



ON A BOAT?

QUESTIONS?